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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,175	03/31/2004	Leo M. Kenen	P0962D 7867	
23735 7590 06/06/2007 DIGIMARC CORPORATION 9405 SW GEMINI DRIVE BEAVERTON OR 07008			EXAMINER	
			SAN JUAN, MARTINJERIKO P	
BEAVERTON, OR 97008		•	ART UNIT	PAPER NUMBER
			2109	
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			06/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
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Office Action Summary	10/816,175	KENEN ET AL.			
	Examiner	Art Unit			
The MAILING DATE of this communication and	Martin Jeriko P. San Juan	2109			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
 Responsive to communication(s) filed on 31 March 2004. This action is FINAL. 2b) ☐ This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. 					
Disposition of Claims					
4) Claim(s) 1-28 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-28 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or Application Papers 9) The specification is objected to by the Examiner 10) The drawing(s) filed on March 31, 2004 is/are: Applicant may not request that any objection to the or Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examiner	vn from consideration. r election requirement. r. a)⊠ accepted or b)□ objected to drawing(s) be held in abeyance. See ion is required if the drawing(s) is objected to the drawing(s) i	ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary (Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te			

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DETAILED ACTION

This is a response to the following case application:

Non-provisional Application: 10/816175 filed on March 31, 2004

This application claims priority from provisional applications:

60/459284 filed on March 31, 2003; 60/463659 filed on April 16, 2003; 60/488536

filed on July 17, 2003; 60/494660 filed on August 8, 2003; 60/463660 filed on

April 16, 2003.

Specification

- 1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.
 - a. US Application No: 09/503881, 60/463660, 10/329315, 09/741779, 10/330033, 60/456677.
 - b. US PN: 5862260, 6066594, 5783024, 6007660, 6066594,6159327, 6283188, 6003581, 6283188, 6003581, 5380695, 6345105,6449377, 6608911.
 - c. US PG Pub: 2002/0080992, 2002/0080994, 2003/0128862.

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d. Unknown reference source: Pg 20, Ln 23 – "Information Response
 AAMVA Unique Identifier."

- 2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.
 - a. Pg 13, Ln 13: http://www.nature.com/nsu/031027/031027-7.html

Double Patenting

1. Claim 16 of this application conflict with claim 11 of Application No. 10/893149. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151

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U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claim 16 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 11 of copending Application No. 10/893149. This is a <u>provisional</u> double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 contains the trademark/trade name KINEGRAM. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the

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trademark/trade name is used to identify/describe KINEGRAM and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 1. Claim 1-3, 5-4, and 10-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hudson et al. [PCT Pub WO/2001/095249].
 - a. Based on independent claim 1, Hudson et al. teach an identification document comprising: an OVD with embedded machine readable data [Pg 25, Ln 8-12], the embedded machine readable data encrypted with an encryption key [Pg 24, Ln 10-20]; a substrate comprising one or more structures carrying data that is associated with the machine readable data embedded in the OVD [Fig 3, Itm 13].
 - b. With regard to dependent claim 2, Hudson et al. teach the document of claim 1 wherein the OVD comprises at least one of a KINEGRAM and an embossed hologram, the OVD having an embedded digital watermark [Pg 25, Ln 8-12] [Pg 24, Ln 10-20].
 - c. With regard to dependent claim 3, Hudson et al. teach the document of claim 2 wherein the digital watermark carries at least one of

an issuer identifier and a machine readable signature related to at least one other element of the identification document [Pg 7, Ln 11-18] [Pg 28, Ln 29 thru Pg 29, Ln 12]. [Digital watermarking is an additional or secondary coding that allows for another level of security/verification (Pg 8, Ln 13). It is open for use with any identification data taught in Pg 28, Ln 29 thru Pg 29, Ln 12.]

- d. With regard to dependent claim 5, Hudson et al. teach the document of claim 2 wherein the digital watermark carries data that is related to other data on the document, and enables authentication of the document by comparison of the data in the digital watermark with other data on the document [Pg 15, 23-30].
- e. With regard to dependent claim 6, Hudson et al. teach the document of claim 5 wherein the data related to the other data on the document is encrypted with respect to other data on the document [Pg 17, Ln 24-27].
- f. With regard to dependent claim 7, Hudson et al. teach a method of providing security to an identification document having at least one storage element [Fig 3, Itm 12] [Fig 3, Itm 14] capable of storing information, comprising: providing an encryption key, the encryption key comprising a public key and a private key [Pg 17, Ln 24-27]; creating an optically variable device (OVD) in a machine readable format [Pg 25, Ln 8-12], the OVD associated with the public key [Pg 17, Ln 24-27]; generating a payload of data for storage in the storage element [Pg 28, Ln 29 thru Pg

29, Ln 12]; encrypting at least a portion of the payload of data with the private key [Pg 17, Ln 24-27]; and transmitting the encrypted payload of data to at least one location on the identification document [Pg 29, Ln 14-29].

- g. With regard to dependent claim 8, Hudson et al. teach the method of claim 7, wherein generating a payload of data further comprises basing at least a portion of the data payload on data that is randomly selected from data stored in the storage element [Pg 15, Ln 23-30 Hudson et al. teach the identification number, or at least part of it is applied to the machine readable data; and that any one of the many parts of the identification number can be used, thus inherently teaching randomness.].
- h. With regard to dependent claim 9, Hudson et al. teach the method of claim 7, wherein generating a payload of data further comprises basing at least a portion of the data payload on data that is encrypted from data that is stored in the storage element [Pg 17, Ln 24-27] [This claim has the following interpretation: payload data is generated where a portion of said payload data is an encryption of some data stored in a storage element. Also payload data is interpreted as all data conveyed by the document.].
- i. With regard to dependent claim 10, Hudson et al. teach the method of claim 7, wherein the storage element comprises at least one of an optically variable device (OVD), optical storage media, hologram, KINEGRAM, Exelgram, Pixelgram, three dimensional bar code, a two dimensional bar code, a magnetic stripe, and a chip [Pg 25, Ln 8-12].

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j. With regard to dependent claim 11, Hudson et al. teach the method of claim 7, wherein transmitting the encrypted payload comprises at least one of embedding, digitally watermarking, printing, and encoding encrypted data in at least one location on the identification document [Pg 29, Ln 18-22].

- k. Based on independent claim 12, Hudson et al. teach an identification document comprising: an OVD with embedded machine readable data [Pg 25, Ln 8-12]; a substrate with one or more structures carrying data that is associated with the machine readable data embedded in the OVD [Fig 3, Itm 13].
- I. With regard to dependent claim 13, Hudson et al. teach the document of claim 12 wherein the OVD comprises an embossed hologram with an embedded digital watermark [Pg 25, Ln 8-12] [Pg 24, Ln 10-20].
- m. With regard to dependent claim 14, Hudson et al. teach the document of claim 13 wherein the digital watermark carries an issuer identifier [Pg 7, Ln 11-18] [Pg 28, Ln 29 thru Pg 29, Ln 12]. [Digital watermarking is an additional or secondary coding that allows for another level of security/verification (Pg 8, Ln 13). It is open for use with any identification data taught in Pg 28, Ln 29 thru Pg 29, Ln 12.]
- n. With regard to dependent claim 15, Hudson et al. teach the document of claim 13 wherein the digital watermark carries data that is related to other data on the document, and enables authentication of the

document by comparison of the data in the digital watermark with other data on the document [Pg. 15, 23-30].

- 2. Claim 16, 21-22, and 24-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Lawandy et al. [US Pub 2001/0037455 A1].
 - a. Based on independent claim 16, Lawandy et al. teach a method of verifying a document comprising: determining jurisdictional information related to the document [Pg 2, Par 0033-0037. Jurisdictional information can be physical characteristics or attributes of the ID document.], wherein the jurisdictional information is mathematically related to a digital watermark embedded in the document [Pg 3, Par 0044]; and using the jurisdictional information to extract the digital watermark embedded in the document [Pg 3, Par 0046].
 - b. Based on independent claim 21, Lawandy et al. teach a method of verifying a document comprising: determining jurisdictional information related to the document [Pg 2, Par 0033-0037. Jurisdictional information can be physical characteristics or attributes of the ID document.], wherein the jurisdictional information is used to obtain a watermark key which is related to a digital watermark embedded in the document; and using the key to extract the digital watermark embedded in the document [Pg 3, Par 0046] [Pg 3, Par 0052] [Pg 3, Par 0054].
 - a. With regard to dependent claim 22, Lawandy et al. teach the method of claim 21, wherein the document comprises a machine-readable feature, which carries the jurisdictional information, and wherein said

determining step comprises reading the machine-readable feature [US Pub 2001/0037455 A1, Pg 3, Par 0054 – Such information can be stored anywhere in the card.].

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- b. With regard to dependent claim 24, Lawandy et al. teach the method of claim 21 wherein the jurisdictional information is combined with predetermined data to form the watermarking key [US Pub 2001/0037455 A1, Pg 3, Par 0044-0046].
- c. With regard to dependent claim 25, Lawandy et al. teach the method of claim 21, wherein the jurisdictional information comprises the watermarking key [US Pub 2001/0037455 A1, Pg 3, Par 0052].
- d. With regard to dependent claim 26, Lawandy et al. teach the method of claim 22, wherein the jurisdictional information comprises the watermarking key [US Pub 2001/0037455 A1, Pg 3, Par 0052].
- e. With regard to dependent claim 27, Lawandy et al. teach the method of claim 21, wherein the jurisdictional information is mathematically related to the digital watermark through a cryptographic relationship [US Pub 2001/0037455 A1, Pg 3, Par 0044-0048, There can be a key to decode information encoded in the digital watermark.].
- f. With regard to dependent claim 28, Lawandy et al. teach the method of claim 21, wherein the jurisdictional information is mathematically related to the digital watermark through a watermarking key [US Pub 2001/0037455 A1, Pg 3, Par 0044-0048, There can be a key to retrieve information encoded in the digital watermark.].

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3. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Critelli [US PN 6260029 B1].

a. Based on independent claim 17, Critelli teaches a method of verifying a document comprising: extracting a public key from a machine readable feature on the document [Fig 1, Itm 36] [Certificate includes holder's public key. Col 3, Ln 21]; extracting a message payload from another machine readable feature on the document, the message payload being encrypted by a private key that forms part of a public-private key pair with the public key [Fig 1, Itm 37]; and using the public key to descramble the message payload [Col 2, Ln 65 thru Col 3, Ln 1-3] [Col 3, Ln 15-22] [Col 3, Ln 46-51] [Col 4, Ln 4-14].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 1. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hudson et al. [PCT Pub WO/2001/095249], and further in view of Chen et al. [US PN 5694471].
 - a. Hudson et al. teaches the document of claim 3, wherein the digital watermark carries secondary information relating to a unique readable issuer identification type data stored in a barcode. Hudson does not teach an identification document further comprising nanoparticle material having a unique machine readable magnetic signature and wherein the digital watermark carries information relating to a unique readable magnetic signature. Chen et al. teaches an identification card comprising nanoparticle material having a unique machine readable magnetic signature [US PN 5694471, Col 5, Ln 62] [US PN 5694471, Col 8, Ln 17]. Chen et al., and Hudson et al. are analogous art because they are both in the same inventive field of counterfeit proof identification documents.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hudson et al. by using a transaction type card such as an ATM card having a unique machine readable magnetic signature from which the digital watermarking is based on because both are counterfeit proof identification type documents that can easily

accommodate such security features. The suggestion/motivation for combining would have been to create a "universal" card providing for card authentication to protect against forgery and copying [US 5694471, Col 5, Ln 15]. Therefore, it would have been obvious to combine Hudson et al. and Chen et al.

- 2. Claim 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli [US PN 6260029 B1], and further in view of Hudson et al. [PCT Pub WO/2001/095249].
 - a. With regard to claim 18, Critelli teaches the method of claim 17, but does not teach wherein at least one of the machine readable features comprises an optically variable device. Hudson et al. teach an identification type document with machine readable features comprising an optically variable device [a small diffractive version of a 2-D bar code incorporated into a portion of the holographic or diffractive image [PCT Pub WO/2001/095249, Pg 6, Ln 1-7]. Critelli and Hudson et al. are analogous art because they are both in the same inventive field of counterfeit proof identification documents.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Critelli by incorporating the 2-D barcode into a holographic image with some stored/encoded data as depicted by Hudson et al. The suggestion/motivation for combining would have been to add another level of security to the document through the provision of a

forensically authenticable feature [which is essentially difficult to counterfeit]. [PCT Pub WO/2001/095249, Pg 6, Ln 3]. Therefore, it would have been obvious to combine Critelli and Hudson et al.

b. With regard to claim 19, Critelli teaches the method of claim 17, but does not teach wherein at least one of the machine readable features comprises a digital watermark. Hudson et al. teach an identification type document with machine-readable features comprising a digital watermark [PCT Pub WO/2001/095249, Pg 7, Ln 11-18]. Critelli and Hudson et al. are analogous art because they are both in the same inventive field of counterfeit proof identification documents.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Critelli by embedding a digital watermark into the barcode of the document as depicted by Hudson et al. The suggestion/motivation for combining would have been to add another level of security to the document because the document can now be constructed in such a way that the digital watermarking code would degrade beyond recognition by attempted scanning or copying of the document [PCT Pub WO/2001/095249, Pg 8, Ln 12-14]. Therefore, it would have been obvious to combine Critelli and Hudson et al.

C. With regard to claim 20, Critelli teaches the method of claim 17, but does not teach wherein the message payload comprises a digital watermark message payload, and the public key is stored in a machine readable optically variable device. Hudson et al. teach a small diffractive version of a 2-D bar code incorporated into a portion of the holographic or diffractive image [PCT Pub WO/2001/095249, Pg 6, Ln 1-7]. Hudson et al. also teach embedding a digital watermark into the barcode of the document [PCT Pub WO/2001/095249, Pg 7, Ln 11-18] [This is a structure embedded in an OVD that can carry data associated with machine readable data.]. While the 2-D bar code can carry some or all of primary coding including encrypted data [PCT Pub WO/2001/095249, Pg 17, Ln 24-27], the digital watermark is an additional or secondary coding that allows for another level of security/verification [PCT Pub WO/2001/095249, Pg 8, Ln 13]. Critelli and Hudson et al. are analogous art because they are both in the same inventive field of counterfeit proof identification documents.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Critelli by adding this diffractive 2-D barcode incorporated into a holographic image and also encoding some data as a digital watermark into the barcode as depicted by Hudson et al. because the counterfeit proof identification document can easily accommodate such both security features. The suggestion/motivation for combining

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would have been to add multiple levels of security to the same document as explained by the suggestion/motivation of implementing claims 18, and 19 combined. Therefore, it would have been obvious to combine Critelli and Hudson et al.

- 3. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lawandy et al. [US Pub 2001/0037455 A1], and further in view of Chen et al. [US PN 5694471].
 - a. With regard to dependent claim 23, Lawandy et al. teach the method of claim 21, but does not teach wherein the jurisdictional information comprises an index, which is used to interrogate a database to obtain the watermarking key. Chen et al. teach jurisdiction information organized as a tree structure type database stored in the identification document [Jurisdiction information also comprise "pointers" to retrieve key information from a database organized as a tree structure.] [US PN 5694471, Fig 3A and Fig 3B] [US PN 5694471, Col 9, Ln 53-55].

 Lawandy et al. and Chen et al. are analogous art because they are both in the same inventive field of counterfeit proof identification documents.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lawandy et al. by storing information in the identification document as a tree structure type database because the counterfeit proof identification document has storage elements capable of

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storing such information. The suggestion/motivation for combining would have been to provide for multiple account records in a single identification document [US 5694471, Col 8, Ln 46-49]. Therefore, it would have been obvious to combine Chen et al. and Lawandy et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Jeriko P. San Juan whose telephone number is 571-272-7875. The examiner can normally be reached on M-F 7:30a - 5:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on 571-272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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MJSJ

JOSEPH DEL SOLE
SUPERVISORY PATENT EXAMINER

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